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10/776,522	02/12/2004	Yohei Makuta	0505-1268P	4129

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EXAMINER	
GEBREMICHAEL, BRUK A	
ART UNIT	PAPER NUMBER
3715	

NOTIFICATION DATE	DELIVERY MODE
07/23/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/776,522	MAKUTA, YOHEI	
	Examiner	Art Unit	
	BRUK A. GEBREMICHAEL	3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *21 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 16-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 16-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/21/2009 has been entered.

2. Currently claims 1-2, 17-19 have been amended; claims 15 has been canceled. Therefore, claims 1-14 and 16-22 are pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Claims 1,3-4, 6, 9-10, 12-13, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605.

Regarding claim 1, Caprai discloses the following claimed limitations, a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (co1.1, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display not labeled), wherein the video image is simulated based on an operating

condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism including a steering stem, and an elongate steering handle capable of being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16), wherein said elongate steering handle is disposed rearwardly of the rear-most part of the body (FIG 2, also see response to argument (1) below), and a control unit (FIG 1, label 14).

Caprai further implicitly discloses, the body for rotatably securing the steering handle mechanism comprising a pair of left and right main frames (FIG 2, label 28), a centrally located main frame (FIG 2, label 22).

Caprai does not positively disclose, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend from the left and right main frames in a direction away from the operator of the simulation system, the control unit being mounted between the pair of left and right main frames and under centrally located main frame.

However, Ritchie teaches, a pair of left and right main frames, a centrally located main frame a pair of sub-frames connected to roughly central portions of the right and left main frames (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, label Pair of sub-frames), and a control unit for the system being mounted between the pair of left and right main frames and under the centrally located main frame (FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

With regard to the recited feature, "the pair of sub-frames extending in a direction away from the operator", according to Applicant's specification, the function of the frames is to attach the simulation system to a flat-surface table (see Para.0035, Para.0049 and Para.0051 of Applicant's disclosure). The prior art (e.g. Caprai) also discloses that the structural features taught in the reference (FIG 2, labels 22 and 28) are employed to secure the simulation system on a table (col.3, lines 45-50). Therefore, it would have been an obvious matter of design choice as to the frame used for securing the simulation system, wherein no stated problem is solved or unexpected result is obtained by prescribing a pair of sub-frames extending in a direction away from the operator.

Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claim 3, a clutch lever and a brake lever (FIG 3, labels 72 and 76),

Regarding claim 4, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claim 6, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56) and includes a throttle grip for an accelerating operation of the motorcycle displayed on the display (FIG 3, label 68 and col.6, lines 65-67),

Regarding claim 9, the display being a display for a personal computer (col.3, lines 17-20),

Regarding claim 10, a casing being formed in a substantially box shape (FIG 1, label 14),

Caprai does not explicitly disclose, a circuit substrate being disposed in an interior of the casing of the control unit, and a plurality of connection cables being connected to the circuit substrate through connectors.

However, Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

Regarding claims 12, 13 and 16, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Ritchie further teaches, the casing of the control unit is disposed between a first main frame and a second main frame (see FIG A below with the Examiner's interpretation)

Therefore, it would have been obvious to one of ordinary skill in the art at the time o the invention was made to modify the invention of Caprai in view of Ritchie by

placing the control unit between a pair of main frames in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Further, providing plurality of flange portions on a given unit in order to attach the unit to a supporting member is an obvious and well-known expedient at the time of the claimed invention was made.

Regarding claim 17, Caprai discloses the following claimed limitations: a riding simulation system for providing an operator with a simulated experience of a running condition of a motor cycle (col.3, lines 64-66), the system comprising a display for displaying scenery viewable to the operator as a video image on the display (see FIG 1, display *not labeled*), wherein said video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (col.3, lines 20-27), a steering handle mechanism including a steering stem, and an elongate steering handle capable of being gripped by the operator (FIG 3, labels 42, 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16), wherein said elongate steering handle is disposed rearwardly of the rear-most part of the body (FIG 2, also see response to argument (1) below), a control unit for said system (FIG 1, label 14).

Caprai further implicitly discloses, the body comprising a pair of left and right main frames (FIG 2, label 28), a centrally located main frame (FIG 2, label 22).

Caprai does not positively disclose, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend from the left and right

main frames in a direction away from the operator of the simulation system, the control unit being mounted between the pair of main frames.

However, Ritchie teaches, a pair of left and right main frames, a centrally located main frame a pair of sub-frames connected to roughly central portions of the right and left main frames (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus, label Pair of sub-frames), and a control unit for the system being mounted between the pair of main frames (FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

With regard to the recited feature, "the pair of sub-frames extending in a direction away from the operator", according to Applicant's specification, the function of the frames is to attach the simulation system to a flat-surface table (see Para.0035, Para.0049 and Para.0051 of Applicant's disclosure). The prior art (e.g. Caprai) also discloses that the structural features taught in the reference (FIG 2, labels 22 and 28) are employed to secure the simulation system on a table (co1.3, lines 45-50).

Therefore, it would have been an obvious matter of design choice as to the frame used for securing the simulation system, wherein no stated problem is solved or unexpected result is obtained by prescribing a pair of sub-frames extending in a

direction away from the operator; and the teaching of the prior art appears to work well for the intended purpose.

Regarding claims 18 and 19, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the end of the centrally located main frame disposed farthest away from the operator (FIG 2, label 22).

Caprai does not positively disclose, the end of the centrally located main frame is connected to a cross frame bridging between tip end portions of the sub-frames, wherein a front face of the control unit faces a rear side of the cross frame.

However, Ritchie teaches, the end of the centrally located main frame is connected to a cross frame bridging between tip end portions of the sub-frames (see FIG A, the section i.e. wall of the control unit where the end of the pair of sub- frames and end of the central frame are connected).

Therefore, here also, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by linking the end of the steering stem to the sub-frames in order to achieve an optimum force distribution so that the simulation system would be more stable.

Note that regarding “wherein a front face of the control unit faces a rear side of the cross frame”, naming or designating a particular side of the device as a “front face” or a “rear face” appears to be one’s perception to consider the particular side as a “front face” or as a “rear face”; and such naming or designation does not affect the structural or functional limitation of the device. Therefore the above designation does not

distinguish the current invention from the prior art (see response to argument (2) below for detail).

Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claims 20 and 21, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a cylinder portion for receiving a steering stem, and wherein each of the right, left, and centrally located main frames has an upper end connected to the cylindrical portion (see FIG A below with the examiner's interpretation, the central frame, and the left and right main frames).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a cylindrical member in order to rotatably secure the steering stem, as taught by Ritchie.

Note that the above limitation is implicitly taught by Caprai (see FIG 2, labels 22 and 28, and FIG 3, labels 16 and 42).

Regarding claim 22, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses, the riding simulation apparatus adapted to be mounted on an elevated mounting surface (FIG 1), wherein said pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and said centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface (FIG 2, labels 22 and 28).

- Claims 2, 5, 7, 8, 11 and 14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605 and further in view of Pittarelli 3,964,564.

Regarding claim 2, Caprai in view of Ritchie teaches the claimed limitations as discussed above.

Caprai further discloses, the steering stem has a generally fan-shaped upper portion (FIG 3, label 42), said elongate steering handle is integrally held on the steering stem through a holder (FIG 3, labels 56 and 54), the steering handle mechanism further compromising one of a clutch lever (FIG 3, label 76) and a brake lever (FIG 3, label 72) are held on the steering handle, and left and tight grips which are mounted respectively to end portions of the steering handle (FIG 3, label 60).

Caprai in view of Ritchie does not positively teach, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle.

However, Pittarelli teaches, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle (e.g. see FIG 1 labels 141,142, 144 and col. 6, lines 53-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by using clamps in order to construct the joint portions in a way that the operating levers will be swingable on the handlebar as taught by Pittarelli.

Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claim 5, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claims 7 and 8, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67),

Regarding claim 11, the control unit further including a casing being formed in a substantially box shape (FIG 1, label 14),

Ritchie further teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie in and further in view of Pittarelli by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

Here also, the above limitation is implicitly taught by Caprai (col.5, lines 19-25).

Regarding claim 14, Caprai in view of Ritchie in and further in view of Pittarelli teaches the claimed limitations as discussed above.

Ritchie further teaches, the circuit substrate is disposed in the interior of the casing (FIG 3, label 3), the connectors are disposed at a lower end portion of the circuit

substrate, and the connection cables are connected to the circuit substrate through the connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie.

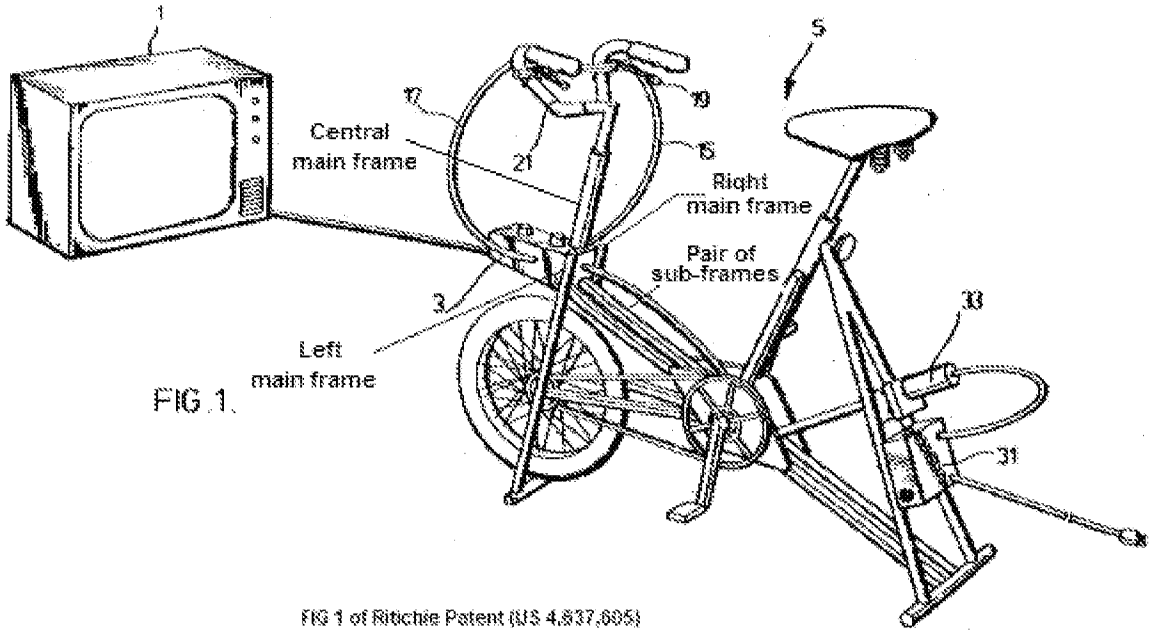

FIG 1 of Ritchie Patent (US 4,837,695)

FIG. 1.

Response to Arguments.

5. Applicant's arguments filled on 05/21/2009 have been fully considered. In the remarks,

(1) Applicant argues that while not conceding the appropriateness of the Examiner's rejections, but merely to advance the prosecution of the present application, each of

independent claims 1 and 17 has been amended to recite a combination of elements directed to a riding simulation system, including inter alia "wherein said elongate steering handle is disposed rearwardly of the rear-most part of the body."

In contrast to the inventions of claims 1 and 17, the Caprai handle bar 60 is mounted above a forward part of the control unit 12, and the elongate handle bar of Ritchie extends in a later direction above control unit 3.

At least for the reasons described above, no combination of Caprai and Ritchie can teach or suggest the combination of elements set forth in each of independent claims 1 and 17. Therefore, independent claims 1 and 17 are in condition for allowance.

- In response to argument (1), the Examiner respectfully disagrees. It appears that the Applicant has misinterpreted the illustration presented in FIG 1 of Caprai's reference (with regard to the controller labeled as 12). Note that label 12 (controller) of FIG 1 represents the entire game unit placed on the table, but not just the section next to the number plate (label 58). For instance, the line "The game unit **controller 12** first **includes** a **base 16** having a planar **bottom face 18** and a **bulbous top face 20** which is representative of a gas tank. A gas tank cover 21 is mounted on an apex of the top face 20 of the base 16 to further characterize a gas tank of a motorcycle, scooter, all-terrain vehicle, snowmobile, jet ski, or the like. It should be noted that in an embodiment wherein a bicycle is imitated, the gas tank may be excluded in favor of a bar or the like" (col.3, lines 28-40), clearly teaches that the controller (FIG 1, label 12) is not just a particular section of the game unit as the Applicant has indicated in the above argument; rather it is the whole game unit placed on the top surface of the table.

Further more, based on the above teaching and also as illustrated in FIG 1 and FIG 2, the steering handle (FIG 1, label 50) is in fact positioned at the back section of the controller unit; and this is consistent with Applicant's currently presented claimed limitation, "wherein said elongate steering handle is disposed rearwardly of the rear-most part of the body."

Therefore, the Examiner concludes that the combined teaching of the references still teaches or suggests Applicant's currently presented claimed features, for the reasons discussed above.

(2) Applicant argues that all dependent claims are in condition for allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein.

For example, each of dependent claims 18 and 19 recites "a forward end of the centrally located main frame disposed farthest away from the operator is connected to a cross frame bridging between forward ends of the sub-frames, wherein a front face of the control unit faces a rear side of the cross frame."

Caprai fails to teach a cross frame. As for Ritchie, the front face of video game (control unit) 3 certainly does not face a rear face of any part of the exercise bike 5.

- In response to argument (2), the Examiner respectfully disagrees. As already presented in the previous office action, and also in this current office action, the control unit taught by Ritchie (FIG 1, label 3) is attached to a cross frame where the end of the pair of sub-frames and the end of the central frame are connected. Regarding the limitation "wherein a front face of the control unit faces the rear side of the cross frame",

this appears to be one's perception to consider a given component's section as a front side (face) or a rear side. That means, any of the sides (or sections) of the control unit depicted in FIG 1 of Ritchie's invention would be equivalently called front or rear side (or face). Such naming or designation of the sides of a given unit does not affect or change the structural or functional limitations of the device; and therefore this does not distinguish the current invention from the prior art. For example, whether any side of the control unit is labeled as a front side or a rear side, the functional limitation of the control unit (which is to display video images consistent with the activities of the user) is not affected or changed.

Therefore, here also the Examiner maintains that Applicant's currently presented claimed features would have still been obvious to one of ordinary skill in the art (at the time of this claimed invention was made) for the reasons discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruk A Gebremichael/
Examiner, Art Unit 3715

/Cameron Saadat/
Primary Examiner, Art Unit 3715